Amendments to the Specification.

Please substitute the following amended paragraph for the first paragraph of page 1:

The present application is related to the present inventors' applications entitled "Characterization Of Objects Of A Computer Program While Running Same" Serial No. —————— 10/073,573 (IBM Docket YOR920020050), and "Program Components Having Multiple Selectable Implementations" Serial No. —————— 10/073,630 (IBM Docket YOR920020023), which were filed on the same day as the present application. These related application are incorporated herein by reference.

Please substitute the following amended paragraph for the fourth paragraph of page 1:

~~Programers~~ Programmers are increasingly ~~programing~~ programming by component assembly. This is despite the fact that the use of components tend to decrease the performance of the program. The programers who design the components do not know anything about the environment the components will be used in, and can therefore not tailor the components for each specific use. The efficiency of a program suffers from the use of such generic components, since it fundamentally depends on the interactions between the components. The performance of a component based program is therefore often less than optimal. Optimizing component interaction is a fundamental problem in constructing efficient component-oriented programs.

Please substitute the following amended paragraph for the third paragraph of page 3:

According to another ~~preferrred~~ preferred embodiment, the aforesaid data representation property comprises a choice of data structure (e.g. hash tree, and compressed data structures) of a component, the aforesaid amount of interaction measured in step (b) comprising a frequency of interaction between each pair of interacting components; the aforesaid cost of interaction comprising a function of the aforesaid frequency and a cost of converting any differing choices of data structures of the pair to a common choice of data structure.

2